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Learning Style: On Demand

Technology: Cisco

Difficulty: Intermediate

Course Duration: 40 Hours

Securing the Web with Cisco Web Security Appliance (SWSA) v3.0 - On Demand



About this course:

This course shows you how to implement, use, and maintain Cisco® Web Security Appliance (WSA), powered by Cisco Talos, to provide advanced protection for business email and control against web security threats.

Through a combination of instructor video, text, and hands-on practice, you'll learn how to deploy proxy services, use authentication, implement policies to control HTTPS traffic and access, implement use control settings and policies, use the solution's anti-malware features, implement data security and data loss prevention, perform administration of Cisco WSA solution, and more.

This course helps prepare you for the Securing the Web with Cisco Web Security Appliance (300-725 SWSA) exam, which leads to CCNP® Security and the Cisco Certified Specialist - Web Content Security certifications.

Course Objective:

After taking this course, you should be able to:

- Describe Cisco WSA
- Deploy proxy services
- Utilize authentication
- Describe decryption policies to control HTTPS traffic
- Understand differentiated traffic access policies and identification profiles
- Enforce acceptable use control settings
- Defend against malware
- Describe data security and data loss prevention
- Perform administration and troubleshooting

Audience:

- Security architects
- System designers
- Network administrators
- Operations engineers
- Network managers, network or security technicians, and security engineers and managers responsible for web security
- Cisco integrators and partners

Prerequisite:

To fully benefit from this course, you should have knowledge of these topics:

- TCP/IP services, including Domain Name System (DNS), Secure Shell (SSH), FTP, Simple Network Management Protocol (SNMP), HTTP, and HTTPS
- IP routing

You are expected to have one or more of the following basic technical competencies or equivalent knowledge:

- Cisco certification (CCENT certification or higher)
- Relevant industry certification [International Information System Security Certification Consortium ((ISC)²), Computing Technology Industry

Association (CompTIA) Security+, International Council of Electronic Commerce Consultants (EC-Council), Global Information Assurance Certification (GIAC), ISACA]

- Cisco Networking Academy letter of completion (CCNA 1 and CCNA 2)
- Windows expertise: Microsoft [Microsoft Specialist, Microsoft Certified Solutions Associate (MCSA), Microsoft Certified Solutions Expert (MCSE)], CompTIA (A+, Network+, Server+)

Course Outline:

Describing Cisco WSA

Technology Use Case
Cisco WSA Solution
Cisco WSA Features
Cisco WSA Architecture
Proxy Service
Integrated Layer 4 Traffic Monitor
Data Loss Prevention
Cisco Cognitive Intelligence
Management Tools
Cisco Advanced Web Security Reporting (AWSR) and Third-Party Integration
Cisco Content Security Management Appliance (SMA)

Deploying Proxy Services

Explicit Forward Mode vs. Transparent Mode
Transparent Mode Traffic Redirection
Web Cache Control Protocol
Web Cache Communication Protocol (WCCP) Upstream and Downstream Flow
Proxy Bypass
Proxy Caching
Proxy Auto-Config (PAC) Files
FTP Proxy
Socket Secure (SOCKS) Proxy
Proxy Access Log and HTTP Headers
Customizing Error Notifications with End User Notification (EUN) Pages

Utilizing Authentication

Authentication Protocols
Authentication Realms
Tracking User Credentials
Explicit (Forward) and Transparent Proxy Mode
Bypassing Authentication with Problematic Agents
Reporting and Authentication
Re-Authentication
FTP Proxy Authentication

Creating Decryption Policies to Control HTTPS Traffic

- Transport Layer Security (TLS)/Secure Sockets Layer (SSL) Inspection Overview
- Certificate Overview
- Overview of HTTPS Decryption Policies
- Activating HTTPS Proxy Function
- Access Control List (ACL) Tags for HTTPS Inspection
- Access Log Examples

Understanding Differentiated Traffic Access Policies and Identification Profiles

- Overview of Access Policies
- Access Policy Groups
- Overview of Identification Profiles
- Identification Profiles and Authentication
- Access Policy and Identification Profiles Processing Order
- Other Policy Types
- Access Log Examples
- ACL Decision Tags and Policy Groups
- Enforcing Time-Based and Traffic Volume Acceptable Use Policies, and End User Notifications

Defending Against Malware

- Web Reputation Filters
- Anti-Malware Scanning
- Scanning Outbound Traffic
- Anti-Malware and Reputation in Policies
- File Reputation Filtering and File Analysis
- Cisco Advanced Malware Protection
- File Reputation and Analysis Features
- Integration with Cisco Cognitive Intelligence

Enforcing Acceptable Use Control Settings

- Controlling Web Usage
- URL Filtering
- URL Category Solutions
- Dynamic Content Analysis Engine
- Web Application Visibility and Control
- Enforcing Media Bandwidth Limits
- Software as a Service (SaaS) Access Control
- Filtering Adult Content

Data Security and Data Loss Prevention

Data Security
Cisco Data Security Solution
Data Security Policy Definitions
Data Security Logs

Performing Administration and Troubleshooting

Monitor the Cisco Web Security Appliance
Cisco WSA Reports
Monitoring System Activity Through Logs
System Administration Tasks
Troubleshooting
Command Line Interface

References

Comparing Cisco WSA Models
Comparing Cisco SMA Models
Overview of Connect, Install, and Configure
Deploying the Cisco Web Security Appliance Open Virtualization Format (OVF) Template
Mapping Cisco Web Security Appliance Virtual Machine (VM) Ports to Correct Networks
Connecting to the Cisco Web Security Virtual Appliance
Enabling Layer 4 Traffic Monitor (L4TM)
Accessing and Running the System Setup Wizard
Reconnecting to the Cisco Web Security Appliance
High Availability Overview
Hardware Redundancy
Introducing Common Address Redundancy Protocol (CARP)
Configuring Failover Groups for High Availability
Feature Comparison Across Traffic Redirection Options
Architecture Scenarios When Deploying Cisco AnyConnect® Secure Mobility

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